

5. (twice amended) A process comprising

(a) bringing together, under in vitro conditions,

(1) an anti-LTNF made

(i) against natural LTNF, or

(ii) against a synthetic [peptides] peptide consisting of at least five amino acids of
the sequence

Leu Lys Ala Met Asp Pro Thr Pro Pro Leu Trp Ile Lys Thr Glu

with

(2) at least one biological toxin derived from animal, plant or bacteria,

to cause an immunological reaction which produces a product capable of being detected by
ELISA, and

(b) detecting [a] the product of such reaction by ELISA.

7. (twice amended) A process as in claim 5 wherein the anti-LTNF is in a fluid state and the
toxin is attached to a plate, said process further comprising

conducting an ELISA binding or ELISA titer on the product of the immunological reaction, [to
determine the wholesomeness of the at least one biological toxin, in a manner comparable to
animal bioassay] and

obtaining a numerical result which is roughly proportional to the toxicity of the at least one
biological toxin, as determined by animal bioassay.

8. (twice amended) A process as in claim 5 wherein the biological toxin is contained in a
fluid selected from the group consisting of food, blood sera and other body fluid, saliva, milk, and
urine and the ELISA is carried out in antigen capture format employing a second antibody.

9. (twice amended) A method for assessing neutralizing potency of an anti-serum [anti-toxin for] against a toxin for which it is specific, said method comprising

determining a neutralizing index given by the difference between [an]

Sub D
5
(1) a numerical assay value for a predetermined amount of the toxin in a predetermined amount of a normal serum, and [minus an]

CJ
Conclude
(2) a numerical assay value for a mixture of the predetermined amount of toxin plus a predetermined amount of the anti-serum, [the antitoxin;]

wherein the toxin assay is determined by ELISA test of the toxin plus normal serum;

and the toxin plus [anti-toxin mixture] anti-serum assay is determined by ELISA test of [a] the mixture of the toxin plus [anti-toxin mixture] the anti-serum, such mixture containing a reduced amount of free toxin due to neutralization by the [anti-toxin] anti-serum,

wherein anti-LTNF [as set forth in claim 2] comprising an antibody made

10
(1) against natural LTNF, or

(2) against a synthetic [peptides] peptide consisting of at least five amino acids of the sequence

Leu Lys Ala Met Asp Pro Thr Pro Pro Leu Trp Ile Lys Thr Glu

is used as a reagent for the ELISA tests and reacts with free toxin[.]

wherein the numerical assay values are given by ELISA binding affinity, and

wherein for a given toxin, a higher neutralizing index is indicative of a greater potency for the anti-serum